Appendix 1

Table 1. Reported facilitators, barriers and solutions targeting the referral pathway of patients suspected of having mild cognitive impairment or early dementia to neurology care.

Themes and subthemes	Facilitators (N)	Barriers (N)	Solutions (N)
1. Individual level (Patients and caregivers)			
1.1. Sociodemographic context		High prevalence of social needs (2). Aging of population (2). Limited access of non-local referred patients to the local healthcare services (1).	
1.2. Literacy (academic and digital)	Higher literacy among the population from urban regions (5).	Predominant low levels of literacy (3).	
1.3. Awareness of cognitive decline	Increased awareness among the general population (2).		
2. Provider level (Healthcare professionals)			
2.1. Behaviors and attitudes of healthcare professionals			
2.1.1. Concerning the assistance of patients with cognitive complaints - **PCCs**		Stigmatization of dementia (1). Lack of assertiveness towards cognitive complaints (1). Doubts about the effectiveness of available cognitive assessment tools (1). Lack of knowledge about all ongoing community projects (1).	Improve the capacity to make decisions of referral (4): ● More assertiveness towards all cognitive complaints, to screen for a differential psychological diagnosis (2). ● Consultation with the Neurology service whenever there are doubts (1).

			● Systematized assessment of patients in consecutive appointments (1). Higher availability of post-referral support, through immediate referral to all effective and easily accessible support services (1). Motivational attitude towards family and caregivers for home monitoring and management of patients (1).
-	**Primary care teams**	Increased awareness of the need for early detection of MCI (2). Collaborative and articulated work within the multidisciplinary team (2). Administration of validated cognitive tools to assess subjective complaints (1). Acknowledgement of family and social context of patients (1). Regular training on ongoing community projects (1). Proximity to patients and consequent improved perception of cognitive evolution (1). Current increased trend of the practice of early referrals (1).	Higher availability of healthcare professionals to discuss clinical cases with peers (1).

2.1.2. Concerning the use of referral criteria	High motivation to refer patients based on potential benefits (16): ● Increased effectiveness in planning the progression of disease, family support and achievement of life goals (6). ● Early treatment (1). ● Follow-up in Neurology care, cognitive stimulation and psychotherapy (1). ● Prevention of progression to more severe cognitive decline (2). ● Better quality of life (1). ● Preservation of autonomy and functionality as long as possible (5).	Partial and subjective compliance with referral criteria (12): ● Selection of referral criteria based on its subjective relevance (major and minor) (11): ➢ *Major relevance:* - Expectations about the benefits of early referral (3). - Belief in the possible absence of clinical progression in 10 to 20 years after a diagnosis (1). - Information provided by family and caregivers (2). - Clinical progression between consecutive appointments (1). - Planning of future possible clinical progression (1). ➢ *Minor relevance:* - Result of the first clinical assessment (1). - Systematized need for referral to Neurology care (2). ● Difficult selection of the most relevant referral criteria (1).	Higher and more rigorous compliance with referral and prioritization criteria (4). Regular review of referral criteria (4). Improve the capacity for objective and structured decisions of referral (4). Refine the ability to identify potential true clinical cases of cognitive decline based on the cognitive assessment performed (1).
2.2 General performance of primary and secondary healthcare teams			

2.2.1. Concerning prevention of cognitive decline due to dementia			Improve the inter-collaborative work to (5): ● Monitor cognitive function in local communities from the age of 65 (2). ● Monitor possible mis-non referred patients (1). ● Promote mental health among the general population, patients and caregivers (2).
2.2.2. Concerning prioritization of early diagnosis of cognitive decline due to dementia			Implementation of new strategies to improve family and caregivers´ adherence to appointments, patients´ follow-up planning and cognitive assessment in primary care (3): ● Inclusion of information about family members, caregivers, and patients´ professional activity and literacy in clinical records (2). ● Remote self-administration of digital tools (1). Improve the early detection of changes in executive cognitive function (1).
3. System level (Healthcare system)			
3.1. Organizational context			
3.1.1. At primary and secondary healthcare services	Very good articulation between both levels of care (8).	Low number of healthcare professionals (3).	Increase human resources to support patients and caregivers in

	Positive evolution of the model of assessment of patients for early detection of MCI (4). Easy use of the referral system (3).	Inaccurate screening and prioritization of referrals (2). Difficult articulation with external healthcare teams (3).	the management of clinical progression (1). Improve the training of professionals on early detection of cognitive impairment and available support services (1). Optimization of referral screening for detection of true priority referrals (2). Integration and better internal communication of ongoing projects (1). Improve the integration between primary and secondary care (1). Improve the collaboration between local healthcare teams and nearby regions (1).
3.1.2. At primary healthcare service		Very short appointments with PCCs (3). Shortage of Social Workers per FHU (1). Lack of cognitive screening appointments (1). Lack of systematized monitoring of patients on the waiting list for Neurology care (1).	Increase the duration of appointments with PCCs (2). Increase the number of Social Workers per FHU (1). Implementation of a specialized brief cognitive screening appointment (1).

		Lack of regular structured activities focused on the prevention of dementia (1). Low availability for extra activities besides usual clinical practice (1). Mandatory compliance with pre-defined health indicators not related to dementia (1).	
3.1.3. At secondary healthcare service		Very long waiting times for Neurology appointments (6). Lack of medical offices (1).	Planning the number of medical offices adequate for timely Neurology appointments (1). Increase human resources to improve Neurology care (2). 3-month waiting time for Neurology appointments (1).
3.2. Research on cognitive decline	Current increased implementation of projects in the field of dementia (2).	Limited support and resources (2). Dependence on external entities to obtain financial support (1).	Integration of externally financed projects into internal health services (1). Investment in internal research projects (1).
3.3. Referral system			Refinement of referral criteria for Neurology care and other care units (2). Design of a classification system of referrals according to prioritization criteria (2). Monitor the compliance with referral criteria (1).

N: Number of participants who mentioned each thematic category; PCCs: Primary Care Clinicians; MCI: Mild Cognitive Impairment; FHU: Family Health Unit